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THE PERUVIAN AGRICULTURAL SITUATION: A LOOK AHEAD

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This report summarizes a recently completed study, Peru, Long-Term Projections of Demand for and Supply of Selected Agricultural Commodities Through 1980. The study was prepared by the Programa de Investigaciones para el Desarrollo of the Universidad Agraria, La Molina, Lima, Peru. This market development study was conducted under contract with the U.S. Department of Agriculture and is one of a series conducted by the Department to evaluate long-term prospects of demand for and supply of agricultural products throughout the world. The data used as a basis for projections are from Peruvian sources and may vary from USDA estimates. Summarization of study results does not imply concurrence by the U.S. Department of Agriculture.

Peru is divided geographically into three regions--the dry coastal region in the west, the mountainous region (sierra) in the center of the country, and the jungle region (selva) in the east. The population (1961 census) is concentrated in the sierra (52 percent) and on the coast (39 percent). A large proportion of the national income is concentrated in the coastal region. The agricultural, industrial, and commercial sectors accounted for 17, 19, and 17 percent, respectively, of Peru's 1964 gross national product (GNP), with agriculture's share showing a declining trend. Major Peruvian exports are fishmeal, long staple cotton, coffee, sugar, iron ore, silver, copper, lead, and zinc. Major agricultural imports are wheat, rice, barley, corn, beef, and milk products. The United States has been supplying a decreasing percentage of Peru's agricultural imports in recent years.

STUDY HIGHLIGHTS

The Peruvian Economy

The economy of Peru was one of the fastest growing in Latin America between 1950 and 1965. Gross domestic income (GDI) grew at a compound rate of 5.2 percent a year, while total population grew at a compound rate of 2.6 per-

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Table 1.--Major macroeconomic variables and gross domestic income, Peru, 1950-65 and projections for 1966-80

Year	Consumption			Gross Investment			Total imports	Total exports	Tax Revenues			Terms of Trade Effects	Disposable GDI	GDI	E+Z	Estimated GDI
	Total (C)	Private (CP)	Public (C^g)	Total (I)	Private (I^d)	Public (I^g)	(M)	(E)	Total (T)	Direct (T^d)	Indirect (T^i)	(Z)	(X^d)	(X)		($\hat{X}$)
	Million soles 1/															
1950	37,206	34,160	3,046	7,387	6,413	974	6,144	5,662	4,354	1,841	2,514	1,738	44,007	45,848	7,400	---
1951	39,856	36,724	3,133	10,051	8,120	1,931	8,301	5,548	5,246	2,342	2,904	3,230	48,036	50,378	8,772	52,535
1952	40,969	37,453	3,516	11,565	9,209	2,357	9,209	6,474	5,774	2,373	3,401	1,656	49,080	51,454	8,129	52,226
1953	42,398	38,816	3,582	12,676	10,147	2,528	10,022	7,159	5,640	1,499	4,141	1,038	51,750	53,249	8,197	53,487
1954	45,291	41,173	4,118	10,943	9,147	1,796	8,783	7,678	6,505	2,499	4,006	1,296	53,926	56,425	8,974	53,569
1955	49,058	44,950	4,107	11,242	7,993	3,249	11,268	8,226	6,925	2,627	4,298	1,475	56,105	58,732	9,701	57,911
1956	49,738	45,435	4,303	13,587	10,930	2,656	13,217	9,123	7,051	2,693	4,358	1,839	58,378	61,071	10,963	61,379
1957	53,096	47,929	5,167	14,927	12,294	2,633	14,777	9,503	8,194	2,806	5,388	1,542	61,484	64,290	11,045	62,550
1958	53,403	48,308	5,099	12,837	10,906	1,931	12,677	9,682	7,428	2,575	4,852	24	60,693	63,268	9,706	58,304
1959	55,239	49,607	5,632	10,189	9,162	1,027	10,838	11,179	7,777	2,762	5,014	-403	62,604	65,366	10,776	58,989
1960	57,228	50,651	6,578	14,029	12,793	1,236	12,992	14,188	9,138	3,498	5,640	347	69,303	72,801	14,535	70,047
1961	60,094	52,113	7,982	15,006	12,297	2,709	14,806	16,380	10,221	3,590	6,632	-829	72,256	75,845	15,551	78,000
1962	62,853	54,321	8,532	17,335	15,309	2,025	16,230	16,976	10,527	3,610	6,917	-429	76,894	80,505	16,547	81,116
1963	66,292	56,577	9,716	19,484	16,629	2,855	17,283	16,539	12,137	4,044	8,093	---	80,987	85,931	16,539	82,347
1964	71,531	60,661	10,870	19,254	15,185	4,070	18,548	17,928	13,701	3,719	9,982	2,572	89,019	92,738	20,500	95,578
1965	76,720	64,635	12,085	22,413	18,552	3,861	21,161	17,855	14,049	3,498	10,551	1,710	94,040	97,538	19,565	95,169
	Projected															
1966	81,751	69,242	12,509	22,800	18,153	4,247	22,117	17,933	15,250	3,691	11,559	3,784	100,636	104,327	21,717	
1967	86,405	72,713	13,692	22,825	19,592	4,672	23,931	18,560	16,280	3,894	12,386	4,752	106,797	110,691	23,312	
1968	88,837	74,529	14,308	25,946	20,807	5,139	25,265	19,256	16,912	4,108	12,804	4,583	109,903	114,011	23,839	
1969	90,790	75,960	14,830	26,933	21,201	5,653	26,165	20,027	17,446	4,334	13,112	4,425	112,527	116,862	24,452	
1970	93,477	78,010	15,467	28,118	21,786	6,331	27,304	20,878	18,102	4,573	13,529	4,259	115,795	120,367	25,137	
1971	96,294	80,121	16,173	29,575	22,484	7,091	28,546	21,817	18,811	4,824	13,987	4,102	119,395	124,219	25,919	
1972	100,958	83,607	17,351	30,837	23,108	7,729	30,041	23,606	20,017	5,186	14,831	4,037	125,369	130,554	27,643	
1973	106,665	87,890	18,775	32,993	24,568	8,425	32,172	25,542	21,488	5,575	15,913	3,959	132,683	138,257	29,501	
1974	112,801	92,489	20,312	35,269	26,086	9,183	34,469	27,636	23,066	5,993	17,073	3,842	140,560	146,553	31,478	
1975	119,305	97,355	21,950	37,661	27,652	10,009	36,941	29,903	24,742	6,442	18,300	3,678	148,903	155,346	33,581	
1980	152,290	121,950	30,340	51,093	35,693	15,400	49,812	44,968	33,469	9,249	24,220	0	190,999	201,735	44,968	

1/ At 1963 prices.

Sources: Table 2 of Peru, Long-Term Projections of Demand for and Supply of Selected Agricultural Commodities Through 1980. Data for each of the years 1950 through 1965 are from Instituto Nacional de Planificacion Statistics. 1966 GDI is an INP estimate, while all other projections for 1966-80 were computed by the Grupo Oferta y Demanda.

cent annually. Mineral and industrial production contributed to this growth. (Copper, iron ore, silver, lead, and zinc are all mined and exported.) Rapid growth in the fishing industry also contributed to the GDI increase.

The Universidad Agraria study constructed an econometric model of the Peruvian economy and used it to project Peru's future GDI. In the model, future growth of the economy depends on projected volume of exports, terms of trade, level of public gross investment, and level of direct tax revenues. A study of each of these variables was conducted, and an estimate of their impact on GDI, imports, tax revenues, consumption, and investment was made.

Peru's GDI is projected to grow 4.1 percent annually between 1965 and 1971 and at 5.6 percent between 1972 and 1980 (table 1). Projected public revenue on current and capital accounts is expected to grow at an annual rate of 5.3 percent between 1966 and 1980. Public expenditures on agriculture have averaged less than 3 percent of the Peruvian Government's budget and are projected to range from 2.8 to 3.3 percent of the projected budget through 1980.

The greatest increase of projected GDI occurs in the urban sector (table 2). Rural income growth is largely determined by the increase in value of agricultural production. This value has not increased very rapidly in recent years and is expected to increase about 1 percent a year between the base period 1960-64 and 1980. Consequently, projected GDI offers little hope of reducing significantly the rural poverty in Peru, particularly in the southern and central sierra.

The Peruvian Population

The population of Peru numbered 11.7 million persons in 1965 and is projected to reach 18.5 million in 1980, an annual increase of 3.1 percent between 1960-64 and 1980 (table 3). Projected rural population will grow at 1.9 percent a year between 1960-64 and 1980, while projected urban population will grow at 4.2 percent. Rural population, which represented about 50 percent of the total in 1965, is projected to account for only 41 percent in 1980. Total population is projected to grow fastest in the coastal and selva regions.

Domestic Apparent Demand for Agricultural Commodities

In projecting domestic apparent demand for individual crop and livestock products, past consumption levels and trends, population and income growth, and price changes were analyzed. Where possible, demand was analyzed on a regional as well as a rural-urban basis. Income and price elasticities were computed using both time series data and available household expenditure surveys. The derived relationships were used with projected income and population growth rates as well as with price changes to project gross requirements for human consumption. Additions to gross requirements were made for nonhuman consumption to obtain projected domestic apparent demand. The major emphasis of the study, however, was on human consumption. Except for milk, milk derivatives, and meats and offals, demand for all product groups between 1960-64 and 1980 is projected to increase faster than population growth. For the period 1960-64 through 1980, increases are smallest for tubers and roots and beans and pulses, and largest for eggs, dairy products, fats and oils, and fresh fruits (table 4). Larger variations are indicated for individual products within these categories for

Table 2.--Projected annual geometric growth rates in Peru's gross domestic income per capita, by region, 1962-70 and 1970-80

Region	1962-70			1970-80		
	Urban population	Rural population	Total population	Urban population	Rural population	Total population
	Percent					
Coast	3.9	2.0	3.5	4.1	2.1	3.6
Sierra	1.8	0.5	0.9	1.9	0.5	0.9
Selva	2.7	2.0	2.2	2.8	2.1	2.3
Peru	3.2	1.0	2.1	3.3	1.0	2.2

Source: Table 5 of Peru, Long-Term Projections of Demand for and Supply of Selected Agricultural Commodities Through 1980.

regions, and for rural or urban areas. The most typical growth rate is almost 5.0 percent annually.

Allowing for supply limitations and some price impact on imports due to recent devaluation of the Peruvian sol, the average Peruvian diet is projected to improve in quantity and quality by 1970. However, it will continue to be deficient and will hide significant malnutrition in the sierra's rural areas.

Supply of Agricultural Commodities

There is good reason to believe recent agricultural production has been underestimated by official statistics. Even so, production must expand beyond its historical rate to maintain its relationship to projected demand.

In projecting crop production, past trends in area cultivated coupled with three hypotheses regarding yield increases were used. Cultivated area expanded more rapidly than population growth between 1951 and 1964. Crop area in each region is expected to expand at its historical rate through 1980. For principal crops, projected area was broken down simultaneously into regional projections of cultivated area by crop or groups of crops. Projected area was analyzed for land use and probable area limitations. Future public and private expenditures on irrigation works, colonization projects, and drainage plans were considered. The analysis indicated available resources would permit cultivated area to expand at its historical average rate of 52,000 hectares annually. The public sector is expected to finance about half the projected increase. Assuming expansion in irrigation, 44 percent of the increase in total cultivated area is expected to be in the coastal region.

Between 1951 and 1964, the general yield index for 11 basic crops did not increase substantially. Considering this fact and the projected public expenditures aimed at improving yields, the study projects yields under three hypotheses. These permitted the general yield index to (1) remain constant, (2) increase 1 percent a year, and (3) increase 2 percent a year. The hypothesis of a 1-percent annual increase is considered the most likely unless funds allocated

Table 3.--Population by regions and by rural and urban areas, Peru, 1950 and 1960 with projections for 1970, 1975 and 1980 1/

Region and area	Population totals						Percentage of total population					
	1950	1960	1965	1970	1975	1980	1950	1960	1965	1970	1975	1980
	1,000 persons						Percent					
Coast:	2,685	3,950	4,928	6,127	7,617	9,430	33.7	39.4	42.3	45.1	48.0	50.9
Urban.	1,861	2,963	3,780	4,797	6,094	7,695	23.3	29.6	32.4	35.3	38.4	41.5
Rural.	824	987	1,148	1,330	1,523	1,735	10.4	9.8	9.9	9.8	9.6	9.4
Sierra:	4,694	5,193	5,615	6,073	6,522	6,948	58.9	51.8	48.2	44.7	41.1	37.5
Urban.	1,267	1,573	1,791	2,041	2,296	2,557	15.9	15.7	15.4	15.0	14.5	13.8
Rural.	3,427	3,620	3,824	4,032	4,226	4,391	43.0	36.1	32.8	29.7	26.6	23.7
Selva:	590	882	1,107	1,386	1,730	2,149	7.4	8.8	9.5	10.2	10.9	11.6
Urban.	140	241	323	430	567	746	1.8	2.4	2.8	3.2	3.6	4.0
Rural.	450	641	784	956	1,163	1,403	5.6	6.4	6.7	7.0	7.3	7.6
Peru:	7,969	10,025	11,650	13,586	15,869	18,527	100.0	100.0	100.0	100.0	100.0	100.0
Urban.	3,268	4,754	5,837	7,199	8,875	10,895	41.0	47.4	50.1	53.0	55.9	58.8
Rural.	4,701	5,271	5,813	6,387	6,994	7,632	59.0	52.6	49.9	47.0	44.1	41.2

	Annual geometric growth rates						Percentage of regional population					
	1950-60	1960-65	1965-70	1970-75	1975-80	1960-80	1950	1960	1965	1970	1975	1980
	Percent						Percent					
Coast:	3.9	4.5	4.5	4.5	4.4	4.5	100.0	100.0	100.0	100.0	100.0	100.0
Urban.	4.8	5.0	4.9	4.9	4.8	4.9	69.3	75.0	76.7	78.3	80.0	81.6
Rural.	1.8	3.1	3.0	3.0	2.6	2.9	30.7	25.0	23.3	21.7	20.0	18.4
Sierra:	1.0	1.6	1.6	1.5	1.3	1.5	100.0	100.0	100.0	100.0	100.0	100.0
Urban.	2.2	2.6	2.6	2.4	2.2	2.5	27.0	30.3	31.9	33.6	35.2	36.8
Rural.	0.5	1.1	1.1	1.0	0.8	1.0	73.0	69.7	68.1	66.4	64.8	63.2
Selva:	4.1	4.6	4.6	4.6	4.4	4.6	100.0	100.0	100.0	100.0	100.0	100.0
Urban.	5.6	6.0	5.9	5.7	5.6	5.8	23.7	27.3	29.2	31.0	32.8	34.7
Rural.	3.6	4.1	4.1	4.0	3.8	4.0	76.3	72.7	70.8	69.0	67.2	65.3
Peru:	2.3	3.1	3.1	3.1	3.1	3.1	100.0	100.0	100.0	100.0	100.0	100.0
Urban.	3.8	4.2	4.3	4.3	4.2	4.2	41.0	47.4	50.1	53.0	55.9	58.8
Rural.	1.2	2.0	1.9	1.9	1.8	1.9	59.0	52.6	49.9	47.0	44.1	41.2

1/ Excludes jungle Indian population.

Sources: Table 12 of Peru, Long-Term Projections of Demand for and Supply of Selected Agricultural Commodities Through 1980. Alberto Cataldi, "Proyeccion de la Poblacion total per sexo y grupos quinquenales de edad, 1960-1980." DNEC, Unidad de Analisis Demografico, Documento de Trabajo.

Table 4.--Annual geometric growth rates of projected domestic apparent demand, Peru, 1960-64 to 1970; 1970-75; and 1975-80

Product Group	Annual geometric growth rates of domestic apparent demand		
	1960-64 to 1970	1970-75	1975-80
	Percent		
Cereals and derivatives	4.9	5.5	6.0
Tubers and roots. . . .	3.1	3.3	3.5
Beans and pulses. . . .	3.9	4.2	4.3
Fresh milk.	5.7	5.9	6.1
Fresh vegetables. . . .	4.8	5.7	5.3
Sugar	4.6	4.8	5.1
Meats and offals. . . .	3.0	5.5	5.9
Eggs.	7.6	7.9	7.9
Milk and derivatives. .	2.6	6.1	6.4
Edible fats and oils. .	7.4	7.3	6.2

Source: Table I of Peru, Long Term Projections of Demand for and Supply of Agricultural Commodities Through 1980.

to agriculture by the public sector increase substantially. These hypotheses were converted to regional yield levels for individual crops and groups of crops by projecting the composition of the yield index based on its past trends. Projected yield levels and cultivated areas were combined to provide projected production on regional and national levels.

The supply of livestock and livestock products was projected under two hypotheses. Both consider number of animals on hand, number of animals slaughtered, carcass weight per animal slaughtered, and in the case of milk, wool, and eggs, projected yield per animal. The first hypothesis is based on relatively optimistic assumptions about the amount of public expenditure on livestock development. The second hypothesis, based on a less optimistic expenditure assumption, was adopted as the one more likely to occur.

Potential Trade

Potential import requirements and export availabilities were determined by subtracting projected domestic production from projected domestic apparent demand (table 5). The resulting deficits or surpluses do not necessarily translate into trade. A growing surplus (or deficit) in a given commodity probably will create pressures to decrease (or increase) the price to the consumer, thus altering the effective demand. Changes in prices may also affect domestic production and may change the amount of public resources devoted to the production of a given commodity. The projections do not take into account possible feedback effects generated in the private and public sectors. They do, however, give broad guidelines for future policy decisions and indicate probable trends in trade.

Table 5.--Domestic apparent demand, national production, and potential trade for major agricultural products, Peru, 1960-64 average and projections for 1970, 1975, and 1980

Products	1960-64				1970				1975				1980			
	Domestic apparent demand	National production	Imports	Exports	Domestic apparent demand	National production	Potential imports requirements	Potential exports available	Domestic apparent demand	National production	Potential imports requirements	Potential exports available	Domestic apparent demand	National production	Potential imports requirements	Potential exports available
	1,000 metric tons															
Cereals:																
Rice, milled	242.6	226.4	16.2	-	359.0	327.3	31.7	-	455.9	413.2	42.7	-	581.0	518.3	62.7	-
Barley	202.7	185.5	17.2	-	240.3	175.1	29.7	-	269.3	166.6	40.8	-	305.7	169.3	56.1	-
Corn	482.8	467.0	15.1	.7	701.3	725.0	-	23.7	1,012.3	955.9	56.4	-	1,501.5	1,246.0	255.5	-
Quinua	22.8	22.8	-	-	23.1	23.2	-	-	25.1	25.1	-	-	27.3	27.3	-	-
Wheat	529.8	149.4	380.4	-	762.0	154.0	608.0	-	955.9	153.2	802.7	-	1,214.1	166.7	1,047.4	-
Tubers and roota:																
Potatoes	1,471.0	1,453.3	17.7	-	1,752.3	1,656.6	95.7	-	1,957.3	1,782.6	174.7	-	2,206.3	1,892.4	313.9	-
Sweet potatoes	148.5	148.2	0.3	-	218.2	200.0	18.2	-	277.6	214.0	63.6	-	356.6	140.0	117.8	-
Manioc	429.1	428.5	3.6	-	631.7	606.1	25.6	-	815.9	829.2	-	-	1,054.9	1,029.1	25.8	-
Olluco	67.4	67.4	-	-	87.7	60.6	27.1	-	103.7	56.1	47.6	-	124.0	51.6	72.4	-
Beans and pulses:																
Lentils, chickpeas and green peas	34.3	32.5	2.0	.2	52.0	44.7	7.3	-	68.0	54.6	13.4	-	89.2	66.7	22.5	-
Horse beans	2.9	2.9	-	-	3.9	5.3	-	1.4	4.9	8.5	-	3.6	6.0	12.4	-	6.4
Broad beans	37.6	37.6	-	-	44.9	44.9	-	-	50.4	50.4	-	-	56.5	56.5	-	-
Other beans	36.7	38.2	-	1.5	50.4	63.6	-	13.2	61.9	97.6	-	35.7	76.7	137.3	-	60.6
Industrial:																
Sugar, centrifugal	327.6	822.4	1.8	496.6	468.2	988.2	-	520.0	592.9	1,142.9	-	550.0	759.1	1,344.1	-	585.0
Cotton, fiber	20.8	137.9	1.9	119.0	30.2	156.9	3.3	130.0	30.9	168.4	4.8	142.3	31.6	204.2	6.9	180.0
Cocoa beans	3.1	2.7	0.5	0.1	4.3	4.1	0.3	0.1	5.4	5.2	0.3	0.1	6.7	6.5	0.3	0.1
Tea	1.2	1.2	1/53.0	1/31.6	1.7	1.7	1/53.0	1/32.0	2.1	2.1	1/53.0	1/32.0	2.6	2.6	1/53.0	1/32.0
Coffee beans	10.4	44.5	1.9	36.0	17.0	57.2	1.8	42.0	23.1	69.9	2.2	49.0	31.3	85.7	2.6	57.0
Tobacco, raw	3.6	2.6	1.0	0.1	6.1	7.5	1.2	2.6	8.4	9.2	1.4	2.2	11.4	12.6	1.4	2.5
Principal meats:																
Beef	88.3	69.5	18.8	-	100.1	89.2	10.9	-	139.9	104.7	35.2	-	196.8	122.5	74.3	-
Pork	43.1	42.6	.5	-	76.4	71.4	5.0	-	105.6	100.3	5.3	-	146.8	133.4	13.4	-
Mutton	21.9	20.6	1.3	-	27.5	26.5	1.0	-	32.0	31.0	1.0	-	37.7	36.7	1.0	-
Poultry	21.1	20.2	.9	-	32.8	32.1	.7	-	47.9	47.2	0.7	-	69.7	69.0	.7	-
Minor meats:																
Guinea pigs	16.3	16.3	-	-	17.4	17.3	.1	-	18.1	18.1	-	-	18.1	18.1	-	-
Alpaca	19.5	19.5	-	-	12.1	15.9	-	-	8.9	8.9	-	-	6.9	-	-	-
Llama	6.2	6.2	-	-	3.8	-	-	-	2.6	2.6	-	-	1.9	7.8	-	-
Goat	15.1	15.1	-	-	20.3	20.3	-	-	24.3	24.3	-	-	29.2	29.2	-	-
Offals	36.1	32.3	3.8	-	47.3	44.9	3.2	.8	61.9	55.8	7.7	1.6	81.2	70.6	14.8	4.2
Eggs	18.6	18.4	.2	-	33.3	32.9	.4	-	48.7	48.2	.5	-	71.4	69.6	1.8	-
Milk:																
Goat milk	71.3	71.3	-	-	99.8	99.0	-	-	131.5	96.6	34.9	-	175.3	104.1	71.2	-
Cow milk & derivatives	687.1	456.4	185.7	40.2	831.4	600.1	231.3		1,121.9	713.8	408.1	-	1,536.1	847.8	688.3	-
Edible fats and oils:																
Edible oils																
Fish oil	4.6	4.6	-	-	8.4	8.4	-	-	11.4	11.4	-	-	15.8	15.8	-	-
Cottonseed oil, deodorized	23.4	23.4	-	-	38.6	28.9	9.7	-	53.3	31.0	22.3	-	73.5	37.6	35.9	-
Other	5.6	-	5.6	-	9.0	-	9.0	-	12.4	-	12.4	-	17.1	-	17.1	-
Edible fats																
Lard	29.2	10.1	19.1	-	39.6	16.6	23.0	-	43.2	23.2	20.0	-	53.1	30.9	22.2	-
Cottonseed	8.5	8.5	-	-	12.4	11.0	1.4	-	16.9	11.0	5.1	-	22.4	14.3	8.1	-

1/ Metric tons.

Source: Computed by Grupo Oferta y Demanda.

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Given these limitations, cereal import requirements are projected to grow at 6.8 percent annually between 1960-64 and 1980. Peru will become increasingly dependent on international supplies to satisfy domestic apparent demand for cereals. Wheat composes 1.0 million tons of the projected 1.4-million-ton cereal import requirement in 1980. Corn and milled rice import requirements may reach 255,000 tons and 63,000 tons, respectively.

In the case of tubers and roots, a rapidly growing import requirement is indicated. It is probable that increased prices, larger public expenditures aimed at increased productivity, and more rapid expansion of area cultivated will narrow the gap. Imports of tubers and roots are likely to be restricted to potatoes and to remain at 18,000 to 20,000 tons instead of the indicated 314,000 tons.

Projections for beans and pulses indicate a growing export availability in 1980 of 67,000 tons for horse beans ("pallares") and the "frijol canario." However, an import requirement of about 23,000 tons for lentils, peas, and chickpeas is projected.

Traditionally, Peru has been relatively self-sufficient in production of fruits and vegetables. No significant change in either imports or exports is projected.

Projections indicate Peru will need imports to satisfy domestic demand for meat, milk and milk products, and fats and oils. Meat imports, largely beef and beef offals, may exceed 100,000 tons by 1980--a fourfold increase over the 1960-64 level. Milk and milk products, in whole milk equivalent, may reach 688,000 tons in 1980--almost a fourfold increase over the 1960-64 average. Fats and oils imports may reach 83,000 tons in 1980. Edible oils may account for 53,000 tons of the total, with lard and cottonseed fat making up the rest. Lard imports will remain near 1960-64 levels, while total imports of fats and oils may increase more than threefold.

Exports are projected for sugar, long staple cotton, coffee beans, tobacco, tea, and cocoa beans. Sugar exports may increase from the 497,000-ton average for 1960-64 to 585,000 tons in 1980. Cotton exports are projected to reach 180,000 tons in 1980, up from the 1960-64 average of 120,000 tons. Projected coffee bean exports will amount to 57,000 tons, compared with 36,000 tons in 1960-64. Tobacco, tea, and cocoa bean exports will be relatively small.